Work Orde				*940	73*						Page 1
Revision ID:	D3219-1 Plate			Accept	*N900	040	100)* s	etup Sta	1.71	S1* S2*
Start Date: Required Date: Reference:	1/02/13 1/18/13	Start Qty: 40.00 Req'd Qty: 40.00	*40 *40	=	Cust Item I Customer:	D:					
Approvals:	Process Pla	an: MLJ	Date: 13 - 01	-03Tooling:	D:	ate:		R	un Sta	171	R1*
					D	ate:			Sto	^{op} *N	R2*
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
: Draw Nbr	Rev	vision Nbr									
D3219	Rev	/ A									
100	,	FLOW WATER JET	:	0.00				UB	- 0		JM 13-Z
Waterjet FLOW CNC Waterje		Memo 1-Cut as per Dwg Rev: Prog Rev:	Dwg D3219	0.00							
110		QC2- Inspect parts off m	achine FAI/FAIB	0.00					,		
110 QC Quality Control		Memo		0.00	Ì			47	<u>&</u>		Jm13-2

120

Quality Control

QC8- Inspect parts - second check

Memo

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORM	MANCE / UPI	DATE			• • • • • • • • • • • • • • • • • • • •
											QA Closed:	Date:	
Work Ord	er:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part	No.		-			Rework Scrap Use-as-is		t Therm	Skid-tube Machining noforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR	No.					Work Order Update			Large Fab	Composite	J	Supplier	
Root					Descri	ption of work order update		Initial	Act	ion	Sign &		,
Cause		Date	Step	Qty	C	or Non-conformance	Cł	nief Eng	Descr	iption	Date	Verification	QC Inspector
Doc/Data	Ш		•										
Equip/Tooling													
Operator													
Material			İ										
Setup	Ш								,				
Other	Ш												
Process	Ш												
Supplier													
Training	Ш												
Unapproved													
							AUI	T CATE	GORY				
Landi	ng (ear				General		_			_		_
		Bending				Bend		Grain			Ovalized		Pressure/Forced
		Centre N	ot Concer	ntric to ()/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	ori Incomplete		Part Incorre	ct	Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/L	Jnclear	Part Lost/M	issing	Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance		Part Moved		_
		Heat Trea	it			Countersink		Mislabe	eled		Positioned \	Vrong	
,		Inspectio	n Strip in	Tube		Cut Too Short		Misread	i		Power Loss/	Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde January-02-13	•			*940	73*						Page 2
Revision ID:	D3219-1			Accept	*N900	040	100)* s	Setup Sta	1 12	S1* S2*
Start Date: Required Date: Reference:	1/02/13 1/18/13	Start Qty: 40.00 Req'd Qty: 40.00	*40* *40*		Cust Item II Customer:	D:			a. a.		
Approvals:		an:	Date:	Tooling: _ SPC (Y/N):		ite:		I	Run Sta Sto		R1* R2*
Sequence ID/ Work Center II 130 *120* Small Fab Small Fab)	Operation Description Small Fab Memo 1-Deburr if r	necessary.	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
*140 * QC Quality Control		QC5- Inspect part comple	eteness to step on W/O	0.00				47	2 9		0As 19 -82 13.02.

150

150 Packaging

Packaging

Identify as per dwg & Stock Location: WA

Memo

*** STOCK IN STEP CELL***

0.00

0.00

47 \$ 13.02.05

											DQA:	Da ⁻	te:	
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFOR	MANCE / UPDATE					
								·			QA Closed:	Da	te:	
Work Ord	er.					DISPOSITION			AGAI	NST DE	PARTMENT	/PROCESS		
Work Ord	٠,٠					Rework	7		Skid-tube Crosst	ube	1	Water Jet	П	Engineering
Part	No.					Scrap	1	Į.	Machining Small		Pro	d. Eng. Coor.	П	Quality
					·	Use-as-is	1	1	noforming Finish	_	4	re/Packaging	П	Other
NCR	No.					Work Order Update			Large Fab Compo	site]	Supplier		
				1	т _									
Root					E .	iption of work order update	1	Initial	Action		Sign &			
Cause		Date	Step	Qty		or Non-conformance	Cr	nief Eng	Description		Date	Verificatio	n	QC Inspector
Doc/Data	\vdash		ĺ											
Equip/Tooling	Н		ŀ											
Operator	Н				İ									
Material	Н													
Setup	Щ													
Other	Н													
Process	Ш						1							
Supplier														,
Training														
Unapproved														
		·				F	AUI	LT CATE	GORY					*****
Landi	ing (Sear				General		-			_			
		Bending			L	Bend		Grain			Ovalized			Pressure/Forced
	Ш	Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance		Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct		Weld
		Crushed/	Crimped,			Burrs		Instruct	ions Incomplete/Unclear		Part Lost/M	issing		Wrong Stock Pulled
1		Cuffs				Contamination		Mainte	enance		Dart Moved			•

Mislabeled

Out of Calibration

Out of Secuence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde				*940	973*						Page 3	
Item ID: Revision ID: Item Name:	D3219-1 Plate	The second second second second second second second second second second second second second second second se		Accept	*N900	0401	\ 00 *	Setup	Start Stop	*NS		-
Start Date: Required Date: Reference:	1/02/13 1/18/13	Start Qty: 40.00 Req'd Qty: 40.00	*40* *40*		Cust Item II Customer:	D:			G:			
Approvals:	Process P	lan:	Date:	Tooling: SPC (Y/N):		ite:		Run	Start Stop		२1* २2*	
Sequence ID/ Work Center II	D	Operation Description OC21- Final Inspection -	Work Order Release	Set Up/ Run Hours	Tool ID		Plan Ac Code Qt	-	•	Reject Number	Insp. Stamp	

0.00

Memo

160

Quality Control

A 13-52-5

												DQA:	Da	te:	
NCR:	Yes	/ No				WORK ORDER NON-O	CON	IFOR	MANCE / UP	DATE		•			
											(QA Closed:	Da	te:	
Work Orde	er:					DISPOSITION				AGAINST D)EP	ARTMENT	PROCESS		
Part I	۰ .olo					Rework Scrap Use-as-is Work Order Update		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite			Water Jet d. Eng. Coor. e/Packaging Supplier		Engineering Quality Other
											<u>_</u>			<u> </u>	
Root					Descri	ption of work order update	l li	nitial	Ad	ction		Sign &			
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	\perp	Date	Verificatio	n	QC Inspector
Doc/Data									i		ı				
Equip/Tooling															i
Operator	П		İ												
Material															
Setup															
Other											İ				
Process															
Supplier															
Training	П													ļ	
Unapproved	П														
						F.	AUL	T CATE	GORY						
Landi	ng G	iear				General									
		Bending				Bend		Grain		Γ	\Box	Ovalized			Pressure/Forced
	П	Centre No	ot Concer	ntric to (o/s	BOM/Route	П	Hardwa	re		٦	Over/Under	tolerance		Temperature/Cure

Cracks Broken/Damaged Inspection Incomplete Part Incorrect Weld Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Cuffs Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled Positioned Wrong Inspection Strip in Tube Cut Too Short Misread Power Loss/Surge Other Drill Holes Offset Ripples in Bend Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Wave/Twist in Tube Folio Outside Dimensions

Work Order ID:

94973

Parent Item:

D3219-1

Parent Item Name:

Plate

Start Date: 1/02/13

Required Date: 1/18/13

Page 1

Start Qty: 40.00

Required Qty: 40.00

Comments:

IPP A04.04.19New issueKJ/JLM ESR B 06.05.25 Wateriet E

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.125 6061-T6 .125 Sheet		Purchased	No			100	sf	153.7162	0.0964	4.058948 4.1			Jm13-2-
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT021		153.7161578							
				1214	73	0.9161578							
				1232	79	152.8			73	3271			

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-O	COI	NFORM	ANCE / UP	DATE			
											QA Closed:	Date:	
Work Ord	er.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part I	No.					Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root						ption of work order update		Initial	Act	tion	Sign &		
Cause	.	Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved						,							
							AUL	T CATE	GORY				
Landi		Bear Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspectio	Crimped. at		o/s	General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		-	on Incomplete ions Incomplete/ nance led	Unclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned \(\) Power Loss/	ct issing Wrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
		Ripples ir	n Bend			Drill Holes		Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

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DART AEROSPACE LTD	Work Order:	94973
Description: Plate	Part Number:	D3219-1
Inspection Dwg: D3219 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

	T		, 			
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.316	+0.005/-0.000	0.3.5	_		V	J-moi
2.293	+/-0.005	2.295	_		ν	
2.965	+/-0.010	2.967			V	
0.566	+/-0.010	0.566	_		V	
0.375	+/-0.010	0.375~	_		v	
R0.125	+/-0.010	R0.125	_		RG-	
13.9°	+/-0.5°	13.90	<u></u>		productor.	
					, ,	
			,			

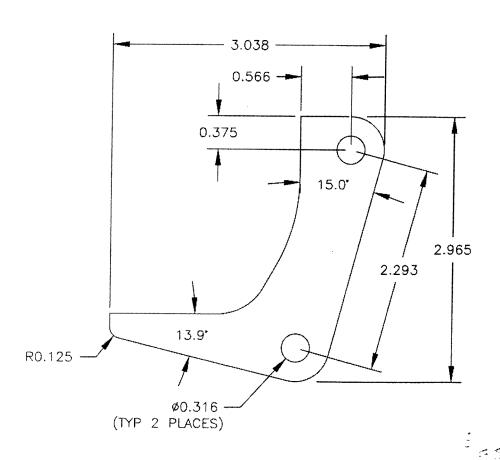
Measured by: Jm	Audited by: ろから	Prototype Approval:	N/A
Date: 13-2-1	Date: 13-25	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	04.04.19	New Issue	KJ/JLM	
В	07.09.06	13.9° dimension added	KJ/JLM	
С	08.04.15	0.125 dimension removed	KJ/DD KJ	N/





DESIGN DRAWN BY		DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHEC	KED, /	APPROVED	DRAWING NO.	REV. A
	#	- A-	D3219	SHEET 1 OF 1
DATE			TITLE	SCALE
 03.10.10			PLATE	1:1
Α		03.10.10	NEW ISSUE	



D3219-1 PLATE

1) MACHINE PER DWG FILE "D3219-1.SLDPRT"

2) MATERIAL: 6061-T6, 0.125 THICK (QQ-A-250/11)

(REF DART SPEC M6061T6S.125)

3) FINISH: NONE

4) BREAK ALL SHARP EDGES 0.005 TO 0.015

5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

6) ALL DIMENSIONS ARE IN INCHES

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